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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,209	04/18/2006	Thierry Charbonneaux	1022702-000265	5179

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

EDWARDS, NEWTON O

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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04/29/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/534,209	Applicant(s) CHARBONNEAUX ET AL.	
	Examiner N. EDWARDS	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) 18 and 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 13-17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/6/09</u> . | 6) <input type="checkbox"/> Other: _____ |

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Applicant urges that 1) on one hand, page 12-15 of the spec described what yarns fibers and filaments are and how they are made. On the other hand, yarns fibers and filaments are each clearly understood and commonly used English language terms.

On one hand, your spec and Applicant has failed to define the terms yarns, fibers and filaments per say at page 12-15 and in your response, but your spec does imply to the Primary Examiner the terms (yarns, fibers and filaments) in question mean the same thing. However, **the use of a confusing variety of terms for the same thing is not permitted**, see MPEP 608.01(o). Thus, the rejection is maintained. To overcome the 112 rejection simply delete the terms “fibers and filaments” from claims 13-20.

Applicant concluded that 2) Yeh does not disclose zinc sulphide but instead discloses **zinc sulphide with copper** activated pigments.

Claim 13 transitional phrase comprising does not exclude the presents of copper.

Hence, the rejection is maintained.

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Applicant urges that 3)Yeh, Roderiguez, and Kane fail to disclose yarns with anti bacterial and antifungal properties.

Really, claim 13 only requires zinc sulphide (and a polymer) to produce antibacterial and antifungal properties in yarns(which is made from fibers and filaments) which is taught by Yeh, Roderiguez, and Kane. Thus the issue is moot.

Applicant generally concludes that 4) Yeh, Kane and Roderiguez do not disclose yarns With antibacterial and antifungal properties as recited by claims 13.

Once again, claim 13 only requires zinc sulphide (and a polymer) to produce antibacterial and antifungal properties in yarns(which is made from fibers and filaments) which is taught by Yeh, Roderiguez, and Kane for reasons of record. Since Yeh , Roderiguez and Kane, also teach zinc sulphide as claimed there fiber s would inherently have the same antibacterial and antifungal properties as claimed due to there same structural identity (same composition) . Hence the rejections are maintained. It is note applicant tries to change a 103 rejection by the Primary Examiner by say in there response that” the 699 application(which is 20050084543) it is believed that the examiner has relied upon the foregoing”. Let me be very clear, the answer is NO.

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1. Claims 13-17, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 lines 1 " yarns, fibers or filaments" is vague and indefinite as to the meaning of the phrase. See claims 14-20 for the same problem.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13, 14, 15, 16, 17, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yeh (US 5,714,255) alone or optionally taken with Kane (WO 9967451).

Yeh teaches yarns which are made from fibers or filaments teach a thermoplastic polymeric fiber such as polyamide(which includes any and all polyamides such as nylon 6,6 which is same as polyamide 6,6) having about 2% to about 10 % zinc sulfide copper (which is zinc sulfide coated and/or encapsulated in mineral). See col.1 lines 38-55 , col.2, col.3 lines 6-10, claims 1, 2, 4, and 5, for example.

Regarding the issue of antibacterial and antifungal properties, the Primary Examiner has a reason to believe that Yeh fibers or yarn inherently possess the claimed properties due to the same structural identity (same fiber composition) as claimed.

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Kane is cited to show that it is well known, in the art of polyamide fibers containing zinc sulfide, that the term polyamide includes any and all nylons such as nylon 6,6. See page 6 lines 5-10 of Kane, for example.

4. Claims 13,14,15,16,17, and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kane (WO 9967451) for reason of record.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yeh or Roderiguez or Kane (WO 9967451) taken with Jacobson '585 (US 5,180,585).

Yeh, Roderiguez, and Kane, **a Du Pont Patent**, is applied for the same reason given above which is hereby incorporated by reference. Yeh, Roderiguez, and Kane teaches all of the claimed invention except ZnS zinc sulphide having a diameter of less than or equal to 5 microns. Jacobson '585, **a Du Pont Patent**, teaches it is well known in the art to coat and/or encapsulated ZnS in at least one metal (mineral) such as copper in order to further improve the antimicrobial properties which is also effective against fungi (which is also antifungal). Jacobson further teaches it is well known in the art to incorporate zinc sulphide having a diameter from 0.1 micron to 5 microns in a polymer composition in order to distribute the zinc sulphide throughout a polymer matrix. See col.4 lines 1-14 for example

Thus, it would have been obvious to one having ordinary skill to combine the ZnS coated and/ or encapsulated with at least one metal (mineral), as taught by Jacobs in the fibers as taught by Kane, in order to further improve the antimicrobial properties of the fiber.

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It would have been obvious to one having to combine the zinc sulphide having the diameter, as taught by Jacobson, for the zinc sulphide, as taught by Yeh, Kane or Roderiguez, in order to distribute the zinc sulphide more uniformly throughout a polymer matrix.

6. Claims 13,14,15,16,and 17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Roderiguez (US 6,067,161).

Roderiguez teaches yarn or fibers or filaments comprising a thermoplastic polymer and 0.1% to 3% or more of zinc sulfide. See col.2 lines 28-end and abstract for example.

No claims are allowed.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Primary Examiner Edwards at telephone number (571)272-1521.

/N Edwards/
Primary Examiner
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